

Amendments To the Claims:

Please amend the claims as shown.

1-12 (canceled)

13. (currently amended) An eddy current measuring device, comprising:  
a flexible base;  
a first electrical component connected to the flexible base;  
a second electrical component connected to the flexible base, the first and second electrical components and the flexible base being collectively sufficiently flexible such that the flexible base can variably conform to a radius of curvature down to 50 mm on a surface of a test body; they can be matched to different radii of curvature of a turbine component; and  
a flexible rear key layer comprising a ferromagnetic material that at least partially covers the first and second electrical components ~~adapted for ferromagnetic signal amplification.~~

14. (previously presented) The device as claimed in claim 13, wherein the flexible base is a flexible sheet.

15. (previously presented) The device as claimed in claim 14, wherein the sheet is formed from polyimide.

16. (previously presented) The device as claimed in claim 13, wherein at least one coil is connected to the flexible base as an electrical component and is a copper coil.

17. (currently amended) The device as claimed in claim 13, wherein the flexible rear key layer is formed by a polymer sheet filled with ferrite.

18. (currently amended) The device as claimed in claim 13, wherein the flexible rear key layer is formed by a flexible metal sheet composed of a ferrite material.

19. (currently amended) The device as claimed in claim 13, wherein the flexible rear key layer is formed by a plastically deformable encapsulation compound, ~~in particular~~ filled with ferrite particles.

20. (previously presented) The device as claimed in claim 13, wherein the device has at least one coil as an electrical component, that is arranged in a planar manner on the flexible base.

21. (previously presented) The device as claimed in claim 13, wherein the device has ferromagnetic signal amplification.

22. (cancelled)

23. (currently amended) An eddy current measuring device, comprising:  
~~a flexible eddy current measuring device, comprising:~~  
a flexible base;  
a first electrical component connected to the flexible base;  
a second electrical component connected to the flexible base, the first and second electrical components and the flexible base being collectively sufficiently flexible that the flexible base can variably conform to a radius of curvature down to 50 mm; such that they can be matched to different radii of curvature of a turbine component; and  
a rear layer comprising a flexible curable encapsulation element material encapsulating ferrite particles, the rear layer attached to at least one of the electrical component and having components on a non-planar geometric surface of the rear layer similar to a curved surface of a turbine component, and cured to geometrically conform to the curved surface to match a non-planar geometric surface of a test body.

24. (previously presented) The device as claimed in claim 23, wherein the flexible base is a flexible sheet.

25. (previously presented) The device as claimed in claim 24, wherein the sheet is formed from polyimide.

26. (previously presented) The device as claimed in claim 23, wherein at least one coil is connected to the flexible base as an electrical component and is a copper coil.

27. (currently amended) The device as claimed in claim ~~13~~ 23, wherein the device has ferromagnetic signal amplification.

28. (new) An eddy current measuring device, comprising:  
a flexible base layer comprising a front surface and a rear surface, the front surface exposed for contact with a test surface of a test body;  
a first electrical coil mounted on the rear surface of the flexible base layer;  
a flexible rear layer comprising a ferrite material at least partially covering the first electrical coil;  
no electrical conductor passing forward from the first electrical coil through the base layer; and  
the flexible base layer, the first electrical coil, and the flexible rear layer forming a stack sufficiently flexible that the front surface of the base layer can variably conform to a radius of curvature down to 50 mm.

29. (new) The device as claimed in claim 28, further comprising a second electrical coil mounted on the rear surface of the flexible base layer surrounding the first electrical coil.

30. (new) The device as claimed in claim 28, further comprising at least one electrical conductor connected to the first electrical coil and passing through the flexible rear layer.